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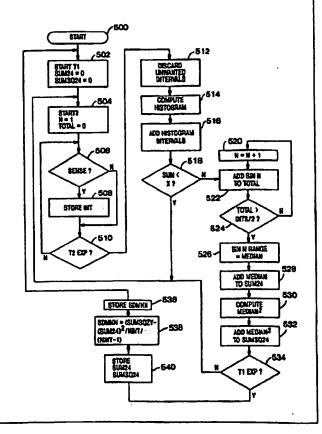
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(54) Title: METHOD AND APPARATUS FOR MONITORING HEART RATE

### (57) Abstract

An implantable monitoring device for monitoring a patient's heart rate variability over time. The device includes a cardiac electrogram amplifier, a sensing electrode coupled to an input of the amplifier, timing circuitry, processing circuitry and a memory. The timing circuitry defines successive monitoring periods each extending over a period of hours, the monitoring periods together extending at least over a period of weeks and also defines successive shorter time periods during each monitoring period. The memory stores heart intervals between depolarizations of the patient's heart sensed by the amplifier during the shorter time periods. The processing circuitry calculates median intervals between depolarizations of the patient's heart sensed by the amplifier during the shorter time periods and calculates standard deviations of the median intervals calculated during each monitoring period. The processing circuitry may also reject heart intervals occurring during tachyarrhythmias and calculate median intervals based only on heart intervals not rejected.



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